

COMSCINST 4700.2F	COG CODE N71	DATE 15 NOV 1988
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DEPARTMENT OF THE NAVY
 COMMANDER MILITARY SEALIFT COMMAND
 WASHINGTON NAVY YARD BLDG 210
 901 M STREET SE
 WASHINGTON DC 20398-5540

COMSCINST 4700.2F
 M-4E
 15 November 1988

COMSC INSTRUCTION 4700.2F

Subj: ADMINISTRATIVE PROCEDURES FOR THE ALTERATION, MAINTENANCE AND
 REPAIR OF MSC SHIPS

Encl: (1) Forms and Reports to be Prepared by Administrative Commanders

1. Purpose. To provide guidance to personnel concerned with the development, planning, programming, funding and accomplishment of alterations, maintenance and repair to MSC ships and equipment.

2. Cancellation. COMSC Instruction 4700.2E.

3. Applicability. The procedures outlined herein are applicable to all MSC operated, government owned or chartered ships with civil service crews and contract operated ships operated for MSC.

4. Scope. This instruction applies to the alteration, maintenance and repair of MSC ships as defined in paragraph 5r. It provides an administrative guide information pertaining to alteration, maintenance and repair of the above mentioned ships. All personnel concerned with such maintenance and repair are expected to exert every effort to maintain the material condition of their ships so that they will meet the standards required for material condition, inspections and certifications, and ensure continued satisfactory operation. Funds available for upkeep will be expended to best achieve this purpose. This responsibility extends not only to personnel ashore, but is directly applicable to ship's force. Ship's force thorough understanding and effective conduct of preventive maintenance comprises a major factor in this important phase of MSC activities. Personnel onboard MSC ships shall be required to perform routine maintenance and upkeep in accordance with governing policy such as the Engineering Operations and Maintenance Manual (EOMM) and the Shipboard Automated Maintenance Management (SAMM) System, where installed, and individual operating contracts in the case of contract operated ships. The COMSC Engineering Officer (M-4E) is the configuration manager who reviews and approves all alterations.

5. Definitions

a. Configuration. The functional and/or physical characteristics of equipment as set forth in technical documentation, such as ship specifications, drawings, etc.

b. Configuration changes. Alterations to the ship's hull, arrangements, machinery, systems or equipment. Alterations, no matter how minor, cannot be accomplished without prior approval

COMSCINST 4700.2F

15 November 1988

in writing by the cognizant authority as specified herein. Configuration changes to machinery, systems, or equipment shall be documented by ship's personnel on OPNAV Form 4790/2K.

c. Configuration Control. The systematic evaluation, coordination approval or disapproval, and implementation of changes (alterations). Approved changes (alterations) are documented and issued by COMSC as TRANSALTs or by the Administrative Commanders as Minor Alts.

d. Configuration Management. A discipline applying technical and administrative direction and surveillance to: identify and document physical characteristics, control changes to those characteristics, and record and report alteration processing and implementation status. The Engineering Officer (M-4E) is the configuration manager who reviews and approves all alterations.

e. Maintenance. Maintenance consists of those actions of routine nature usually performed by ship's personnel on a periodic basis to preserve or keep the ship's hull and equipment in good material condition and operating efficiently. Maintenance may be preventive (as when painting, performing visual checks, or lubricating) or it may be corrective (unscheduled maintenance, as when replacing worn or broken parts).

f. Repairs. Repairs are those actions taken to restore ship's hull and equipment to sound condition after damage, injury or excessive wear. Minor repairs normally will be accomplished routinely by the ship's force. More extensive repairs which are beyond the ship's force capability generally will require the assistance of an industrial facility. When necessary, an availability will be assigned to make the ship accessible to an industrial activity.

g. Voyage Repairs. General repairs which can be accomplished during regular in-port time without requiring a change in the ship's operating schedule.

h. Emergency Repairs. Unexpected repairs which must be accomplished if the ship is to sail on its assigned mission.

i. Alterations. An alteration is any change in hull, machinery, fittings, equipment, arrangement or allowance which involves a change in design, material, quantity or location of components in a ship. It is of utmost importance that these changes be documented, approved, and coordinated with correction and update of ship's technical documentation, e.g., applicable drawings, technical manuals, spare parts, etc. All MSC personnel, whether Headquarters, Area Command or shipboard, have an important responsibility to ensure only approved alterations are accomplished on their ships.

j. Sponsor Alteration. Operational or military type alteration that is initiated and funded by the agency for which MSC is operating the ship in order to meet requirements of their mission, enhance their performance or provide for a function deemed by them as necessary. Sponsor Alterations will be handled just as any other alteration request with the sponsor considered as the originator. COMSC Headquarters will develop the TRANSALT request and issue the associated approved TRANSALT after review. Thus, review and approval actions are identical with the exception that the sponsor is relied upon to determine technical adequacy of his systems and justification of the alteration itself.

15 November 1988

k. Minor Alterations. Minor Alterations stem from operational improvements where a minor change to a system is implemented and for which design support is not required. Minor Alterations also would cover those items previously defined as Alterations Equivalent to Repair (AER). Minor Alterations have a cost limitation of \$25,000 including technical documentation. An example of a Minor Alteration would be installing a bypass line around a piece of equipment to facilitate maintenance or replacing an obsolete vent fan. There are three specific types of Minor Alterations which require further consideration. The first consists of Minor Alterations on ships of one class with units operated by different Administrative Commanders. In such cases, it is imperative that a coordinated development effort be carried out by the initiating Administrative Commander to ensure class applicability of alterations. The second consists of alterations which are, in themselves, minor in nature but significantly alter larger or more complex ship systems or assemblies. These must be treated as normal TRANSALTs. Finally, Minor Alterations shall not include the addition or replacement of any electronic navigational aid, exterior communications, or identification system. Such systems affect compatibility with other ships, aircraft and shore facilities and must be approved by COMSC (M-4E) as Programmed or Unprogrammed Alterations.

l. Fleet Modernization Program (FMP)

(1) The FMP provides the normal management structure by which the characteristics of ships of the fleet other than MSC ships are improved. In many instances, such improvements are desirable on MSC ships with identical or similar fleet compatible systems installed. Changes to ship characteristics are SHIPALTs, MACHALTs, ORDALTs or field changes and are developed and installed when safety, technical or military characteristic considerations necessitate ship configuration changes. The following table shows those areas for which NAVSEA 931 will retain configuration control through the FMP:

	COMM	UNREP	SURF SHIP SURV	FLIGHT DECK F/F	AVIATION FACILITY
T-AO 105 CL	X				
T-AO 143 CL	X				
T-AF 58	X				
T-AE 26	X	X	X	X	X
T-AFS 8 CL	X	X	(1)	X	X
T-AO 187 CL	X	X	(1)	X	X
T-ATF 166 CL	X	X	(1)		

(1) To be determined on a case basis.

(2) The retention of configuration control in these vital areas is important to CNO and is necessary for overall fleet planning. For most of the older vessels, T-AO 105 and 143 classes and T-AF 58, only communications capabilities will be controlled by the FMP.

(3) FMP alterations will be issued as Title K SHIPALTs and will be funded separately by CNO for a designated fiscal year. MSC schedules and accomplishes FMP K-alt's during the funded year. The MSC TRANSALT process is not to be used to override or circumvent the FMP efforts.

COMSCINST 4700.2F

15 November 1988

(4) The above Table indicates that alterations in the area of Surface Ship Survivability, i.e., lifesaving, firefighting, CBR-D, etc., will be considered for inclusion in the FMP on a case by case basis for the T-AO 187, T-AFS 8, and T-ATF 166 class vessels. Any request in this area is to be submitted to COMSC as an alteration and COMSC will determine if a given request should be submitted for inclusion in the FMP program. Conversely, if alterations are developed for ships other than MSC ships in these areas, COMSC will review them for applicability on MSC ships and initiate TRANSALT procedures if they are judged desirable.

(5) Title D SHIPALTs are regarded as NAVSEA recommendations to the fleet on problems. MSC may have already identified and corrected them. Title D-altS are not separately funded by CNO; to implement a D-alt an Alteration Request for approval and funding must be submitted in accordance with this instruction. COMSC receives and reviews all such D-altS for applicability to MSC ships.

m. MSC Funded (Commercial Type) Alterations. Programmed and Unprogrammed Type Alterations, which are paid for by MSC operating funds and similar alterations which are funded on a per diem basis from revenues generated by sponsor use of a ship.

n. Non-MSC Funded Alterations. Operational and Military Type Alterations which are paid for from other funds. Sponsor Requested Alterations to all special project ships, and Programmed and Unprogrammed Alterations to special project ships funded on a reimbursable basis are included in this category. FMP compatibility alterations are authorized and funded separately by CNO. See paragraph l.

o. SCN Funded Alterations (New Construction/Conversion). The procedures outlined in COMSCINST 4700.8A are applicable to new construction vessels during the funding period of SCN.

p. Programmed Alterations. Alterations which are significant as to cost or fleetwide applicability and which lend themselves to advance planning are treated as Programmed Alterations. Such alterations specifically are approved and identified in the budget with the applicable ships, and funds are provided as necessary for accomplishment within a fiscal year. Every effort must be made to complete Programmed Alterations during the fiscal year in which they are planned for accomplishment.

q. Unprogrammed Alterations. Alterations of a limited application and those of day-to-day nature which do not lend themselves to advance planning are treated as Unprogrammed Alterations. These generally represent emergent requirements for which material is available and which may be scheduled for completion during the first convenient ship availability. Funds are provided in the budget for each specific ship but without identification as to specific ship and alteration. Unprogrammed alterations may be accomplished for each ship only to the extent that funds have been provided. If these funds are exhausted, then a reprogramming request is necessary to facilitate the accomplishment of additional Unprogrammed Alterations.

r. MSC ships. Government owned or chartered ships with civil service crews and contract operated ships as specified in individual operating contracts.

15 November 1988

6. Material Condition Standards, Inspection and Certification

a. Material Condition Standards. The minimum standards for material condition for civil service manned ships permanently assigned to MSC are the same as those of the United States Merchant Marine and are derived from the rules of the American Bureau of Shipping (ABS) and the regulations of the U.S. Coast Guard for ship inspection. In certain instances, as in the case of NFAF ships, it is prudent to apply more stringent standards to ensure survivability or provide redundancy. In ships operated for MSC by contract operators, these standards are defined by the individual operating contracts.

b. Inspections and Certification. To assure MSC ships are maintained in compliance with prescribed material standards, the following inspections and certifications are required:

(1) U.S. Coast Guard Certification. While government owned or bareboat chartered ships are public ships and are not required by law to carry U.S. Coast Guard Certificates of Inspection, it is the policy of COMSC that, whenever service or design permits, all MSC ships will be certificated by the U.S. Coast Guard in accordance with standards developed by that agency for applicable ships. Therefore, unless specifically exempted by COMSC, all MSC ships shall possess valid Certificates of Inspection before sailing. If such a certificate cannot be obtained, the Administrative Commander shall so inform COMSC, setting forth the reasons. COMSC shall determine whether or not the ship will sail as scheduled. Some MSC ships operate in areas where the services of USCG Inspectors are not available. However, every effort shall be made to ensure that their material condition will meet USCG regulations to the extent practicable. See COMSC Instruction 4730.3E.

(2) American Bureau of Shipping Classification. All ships operated by or for the Military Sealift Command, except ships specifically exempted by COMSC, shall at all times be maintained in class with the American Bureau of Shipping. To correlate ABS standards with certain phases of Navy operation, ABS will accept Navy-inspected material in lieu of ABS-inspected material. To maintain classification, ships shall be kept in a material condition to pass the required ABS surveys.

(3) Load Line Certificate. All ships which are certificated by the U.S. Coast Guard and classed with ABS shall have a currently endorsed Load Line Certificate issued by ABS. This certificate shall be renewed by ABS as required by USCG "Load Line Regulations."

(4) Cargo Gear Certification. Cargo gear of all MSC ships shall be certificated by American Bureau of Shipping. See COMSC Instruction 3121.9.

(5) Naval Board of Inspection and Survey. All USNS ships whose overseas assignment, arrangements or construction preclude USCG certification require triennial INSURV inspections. Guidance for scheduling and reporting Special arrangements to accomplish modified INSURV trials and material inspections on Naval Fleet Auxiliary Force ships classified by ABS may be approved by the responsible SUBINSURV Board based on review of available ABS inspection reports. The intent of a modified INSURV inspection is to minimize the duplication of inspection requirements between ABS and INSURV.

15 November 1988

7. Repairs

a. General Requirements. Repairs are intended to restore equipment to suitable operational condition. Any work which modifies original design conditions, deviates from drawings or requires change to Technical Manual or ship's allowance is an alteration and should be processed as such.

b. Preparation of Repair Lists. For civil service manned ships, the appropriate ship Department Head shall prepare requests for repairs for submittal to the Repair Officer (Chief Engineer). The Chief Engineer shall compile a repair list for the ship and forward it to the appropriate Administrative Commander. The repair list shall be prepared as comprehensively as possible, but not necessarily in specification format. Each requested repair shall be identified as (a) mandatory or (b) desirable. Each requested item shall identify the equipment to be repaired, describing the nature of the fault, recommending the repairs necessary, and accurately describing the nature of the fault, recommending the complete repairs. Administrative procedures applicable to details of repair lists, i.e., typing, number of copies, deadline for submittal, etc., shall be formulated by Administrative Commanders. Procedures for contract operated ships shall be as outlined in the individual operating contracts.

c. Preparation of Work Packages. Administrative Commanders, contract operators in accordance with their contracts, and other subordinate commanders as directed shall prepare work packages based on ship repair lists and in addition, such repair items as may be required to retain ABS classification, secure U.S. Coast Guard Certifications, correct INSURV deficiencies, accomplish approved alterations only, and for work considered necessary by the cognizant commander.

d. Solicitation Documents. At the time solicitation documents (Invitation for Bids (IFB), Request For Proposal (RFP), and Request for Quotation (RFQ)) are forwarded to prospective offerors, Administrative Commanders and other subordinate commanders issuing the solicitation document shall forward for expedited delivery to COMSC (M-4E) the following:

- one copy of the solicitation document,
- one copy of the independent Government cost estimate,
- one copy of the source selection plan (when applicable), and
- two copies of the specifications.

Within two days after award of a ships repair contract/job order, the Administrative Commanders shall also forward to COMSC (M-4E4), a copy of the offerors proposed line item prices as well as the Abstract of Bids (DD Form 1501-1, used in conjunction with an IFB solicitation document) and/or a Summary of Offers (used in conjunction with an RFP or RFQ solicitation document). The abstract of bids/summary of offers shall provide the Administrative Commanders' independent cost estimate for the work to be performed by the specification under the subject contract/job order. In addition, COMSC must be notified when any solicitation is canceled and when no offers are received in response to a solicitation.

15 November 1988

8. Major Alteration Funding

a. General. The procedures contained in this directive and in individual Memoranda of Understanding (MOUs) with the various sponsors for which MSC operates ships establish timetables for the submittal of sponsor requested alterations. The lead time for funding for such projects is critical to support a technically correct and cost effective installation or modification.

b. Sponsor Funded Alterations. Sponsor funded alterations or modifications aboard an MSC ship for which MSC must design and procure GFE require that attention be given to adequate lead time. For such a project to ensure that GFE and supporting Government Furnished Information (GFI) are timely, planning for these alterations must be completed not less than 24 months prior to the start of the shipyard period in which they are to take place.

c. SHIPALTs "K" AND "D". SHIPALTs "K" and "D" are received from the Naval Sea Systems Command (NAVSEA). "D" ALTs will be funded as MSC TRANSALTs. "K" ALTs will utilize funding authorization provided by NAVSEA. Care will be taken to ensure that funds provided are utilized within the fiscal year authorized for use.

9. Alterations

a. General Requirements. All alterations to MSC ships will be made with an approved TRANSALT. Approved alterations are documented and implemented as TRANSALTs (MSC Report 4720-2). The Engineering Officer (M-4E) at MSC Headquarters is the approving authority for all alterations. He has delegated this authority to Administrative Commanders for Minor Alterations. Once an alteration has been approved, in the case of civil service manned ships, it is issued to the cognizant Administrative Commander for inclusion in a work package. In the case of contract operated ships, it is forwarded to the Contracting Officer (M-10) for issuance to the contract operator under the terms of the applicable contract. Any modification requires prior written approval as well as USCG and ABS approval as appropriate. Work packages must not contain alterations not on record at COMSC. Any unauthorized alteration fund on an MSC ship will require a complete report from the Administrative Command describing when the alteration was accomplished, who authorized the alteration, what funds were used to accomplish the alteration and how the alteration affects ship mission, system functions/operations and its effect on associated systems.

b. Minor Alterations. Minor Alterations have a cost limitation of \$25,000 including technical documentation. Minor Alterations are to be issued on MSC Form 4720/2 and copies sent to COMSC and all Administrative Commanders. Numbers for Minor Alterations will be issued by the appropriate Headquarters engineering manager upon request. This request may be made by telephone.

c. Normal Cycle of an Alteration Request

(1) The normal cycle of an alteration request takes between 9 to 22 months from initial request to final installation on the ship. This section is intended to describe the process of an alteration request and provide time guidelines for each phase. An alteration request may be

COMSCINST 4700.2F

15 November 1988

originated anywhere within the Command. The following outline assumes it starts at the ship only because that is the most basic and, therefore, most comprehensive example:

(a) The ship will prepare a voyage repair request (VRR) identifying a problem and a recommended solution. This voyage repair request is to be submitted to the cognizant administrative command.

(b) The VRR is screened by the administrative command and the ship is advised if repair or alteration action will be taken (5 to 14 days).

(c) Alteration action is initiated and an initial determination is made of the scope and complexity (14 days).

(d) Outside engineering support task developed and issued (14 to 30 days).

(e) Shipcheck scheduled and conducted (10 days to 4 months).

(f) Final verification of the alteration requirement is made and the scope and complexity determined (5 days).

(g) Design work completed; calculations and sketches prepared and necessary material identified (1 to 3 months).

(h) Alteration request prepared or Minor Alteration action issued (10 days). In the case of a class Minor Alteration, comments are solicited from other Administrative Commanders and COMSC prior to issuance (21 days).

(i) MSC Headquarters review (60 days).

(j) If approved:

1. Prepare work item with supporting plans (1 to 2 months).

2. Order long lead material (1 to 6 months).

3. Schedule availability (1 to 12 months).

4. Execution.

(k) Provide Technical Documentation.

(2) Figure 1 depicts the normal cycle of alteration requests. It should be noted that occasionally operational, economic or political considerations will necessitate variation from the above guidelines. In such a case, MSC should be notified and authorization for variance requested.

15 November 1988

d. Alteration Proposal. An Administrative Commander may elect to submit an alteration proposal rather than an alteration request for those alterations which would require extensive engineering to prepare a Ship Alteration Request. This is an informal submission where the alteration is proposed for Headquarters consideration as a concept. If the proposal is deemed to have merit, COMSC may give concept approval and request the Administrative Commander to prepare a complete Ship Alteration Request. An alteration proposal shall be submitted upon the Ship Alteration Proposal (MSC Form 4700/14).

e. Requests for Alterations

(1) All requests for alterations, whether initiated by ship's force or the Administrative Commander, must be submitted on MSC Forms 4700/11 & 4700/12 and should contain the following basic information:

(a) Area Command's request number.

(b) Requesting Area Command.

(c) Ship name(s).

(d) Note if an alteration is applicable to all ships of a class assigned to the requesting Area Command.

(e) A brief title of the alteration.

(f) Identify references and enclosures.

(g) Justification for the expenditure of government funds.

(h) A description of the problem in detail. Descriptions are to be sufficient in detail to allow a technical evaluator, without any previous knowledge of the problem, to understand the nature, source and scope of the problem. Brief background statements are indispensable.

(i) Proposed solution in detail

1. The proposed solution should include references and calculations that provide justification for all new equipment and material. Examples of calculations required include: pipe diameters and wall thicknesses, electrical breaker ratings, plate type and thickness, etc.

2. All information included should be in accordance with acceptable commercial standards. Where commercial standards are invoked, they should be specifically called out (e.g., "the following steering alarms are provided in accordance with 46 CFR 111.93-13".) The following chart may be used as a guide.

15 November 1988

SYSTEM

STANDARDS IN ORDER OF PRIORITY

Piping

USCG, ABS, SNAME, Crane (for calculations)

HVAC

USCG, ABS, SNAME, ASHRAE

Electrical

USCG, ABS, IEEE Standard 45

Structural

USCG, ABS, AWS

Habitability

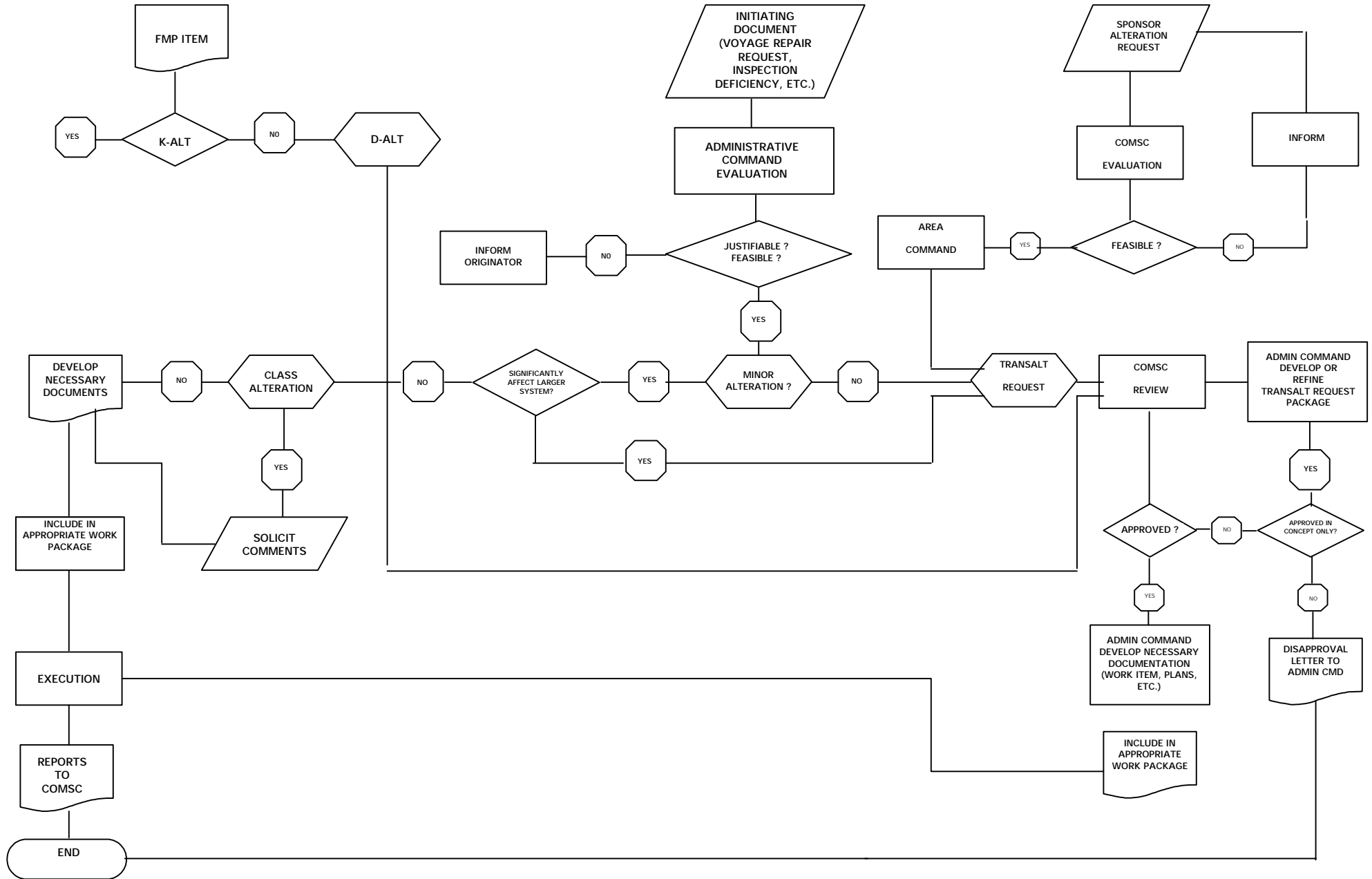
USCG, COMSCINST 9330.6C

Painting/Coating

COMSCINST 4750.2B

3. GEN SPECS should not be used unless the subject is not covered by commercial standards (e.g., CBRD washdown systems, bromination of potable water, UNREP gear, etc.).

4. MARAD standards should not be used.



15 November 1988

(j) Provide an independent Government cost estimate; include breakdown by elements of cost (e.g., cost of material required, labor, overhead, technical manuals for new equipment, spares, Integrated Logistics Support (ILS), Provisioning Technical Data (PTD), engineering, removals, scrapping, and etc. It is essential that the cost estimate includes the support functions as well as the core work to be accomplished. A brief narrative supporting the estimate and how the estimate was derived shall be included.

(k) Description of work necessary and information relative to plans, including drawings or sketches. Description of the work necessary should be as detailed as would be provided to a contractor. Provide work items where applicable. Sketches shall be provided in almost all instances. Only the most simplistic TRANSALT request will not be accompanied by a sketch. When specific equipment is specified, copies of vendor catalog data shall be provided.

(l) Condition of any equipment to be replaced together with name, size, and type of new equipment, if required. Evaluation of an alteration is abetted when a brief survey of equipment to be replaced is included. The replacement item(s) should be thoroughly identified by serial number, model, size, type, catalogue number, and/or any other information which might aid in identification.

(m) Justification for alteration including ship/personnel safety, performance attainment/improvement, and when applicable, monetary savings. Proper justification is required. Justifications citing increased efficiency or cost effectiveness should present detailed economic comparisons, such as, the cost of replacement versus cost of continuing repairs. Justifications citing safety (even those which may seem to be common sense to the writer) should detail the inherent dangers and past accidents, if applicable.

(n) Additional load placed on present power plant and other services such as cooling water, air, HVAC, steam, etc. For TRANSALTs that modify existing systems (e.g., HVAC modifications), the effect on the existing system is to be determined by calculations (e.g., will rebalancing be required?).

(o) Estimate of weight change and vertical and longitudinal location of weight above the baseline. Maintaining a record of weight changes to a ship is important to the overall control of ship stability. The weight and moment effect of TRANSALTs provides the first indication of the need for corrective action of the ship's stability or to obtain a detailed shipyard weight report. The weight and moment effect of one TRANSALT may be minimal. However, the cumulative effect of many may be substantial, particularly for smaller ships of the MSC fleet. Hence, net TRANSALT weight changes of over 0.1 tons (224 lbs.) are to be reported including the vertical height above the baseline and longitudinal distance from the forward perpendicular (FP), to tenths of a foot.

(p) Where a reduction in space for crew/passenger accommodation, payload, or sponsor space will result, a statement as to the amount of space reduction with applicable reasons shall be submitted. In addition, if the utility or access to space is affected, this shall be noted. If available, documentation indicating sponsor concurrence should be included.

15 November 1988

f. Review of Alterations. Upon receipt of a Ship Alteration Request the authorized Headquarters engineering manager will direct a technical review to determine the applicability, desirability, technical adequacy, and cost validity of the alteration. The Alteration Request Worksheet (MSC Form 4700/13) will be used to document the technical review, and recommend approval action and classification of the alteration. The same procedure is to be used for Minor Alteration review at the administrative command level. If a Minor Alteration is identified as a class alteration then comments should be solicited by the originating Administrative Commander from others operating ships of that class as well as the applicable Headquarters engineering type desk. Normally twenty-one days should be allowed for the return of comments. The following applies to the review of alteration requests:

(1) Generally, alterations will be considered for applicability on a class basis. Alterations accomplished on a single ships normally will be restricted to work required to bring the ship to the same material standards as other ships of its class or unique operational requirements. MSC can fund and accomplish alterations which normally would be incurred by a commercial shipping company. For other alterations, funds must be obtained from other appropriation sources. As a result, alterations are either MSC funded or non-MSC funded. MSC funded alterations are reflected in the MSC rate structure. Therefore, an alteration of this class will be approved only for one of the following reasons:

- (a) It will result in decreased costs and will therefore be self liquidating.
- (b) It is necessary to provide adequate accommodations or facilities for the user or for shipboard personnel.
- (c) It is necessary to assure reliability of operations.
- (d) It is required for safety of embarked persons or shipboard personnel.
- (e) It is required by a governing regulatory body.

In forwarding alteration requests, Administrative Commanders shall classify them as to type and justify them in detail against the reasons stated above.

(2) Administrative Commanders must ensure that communication on the alteration process is complete by informing both requester, applicable ship and other affected Area or Subarea Commanders of:

- (a) Notification of Administrative Commander screening (approval or disapproval) within two weeks.
- (b) Notification of shipcheck schedule including alterations to be shipchecked.

(c) A copy of the advanced overhaul planning schedule including alterations to be accomplished.

g. Approval of Alterations

(1) Following technical review, TRANSALT requests submitted to COMSC will be acted on in one of the following decision events:

(a) Approved: Approved TRANSALT requests convey authority to proceed and funding information required to accomplish the ship alteration.

(b) Approved with comments: This approval contains binding restrictions in the letter of approval which must be adhered to in the accomplishment of the alteration.

(c) Approved in concept: This approval is made tentatively when the concept appears desirable but additional technical information is needed to complete the evaluation and review of the proposed alteration.

(d) Disapproved: No action may be taken on the proposed alteration upon receipt of a disapproved TRANSALT request. In each case, COMSC will provide the rationale for disapproval. Reconsideration may be requested if further justification is provided for re-evaluation.

(2) All TRANSALTs approved by COMSC will be forwarded to all administrative commands within 15 days of TRANSALT date. Requesting administrative commands will be notified of all disapprovals by letter within 15 days of disapproval. Alteration requests normally require 60 days to process due to the need to investigate the background, to secure the comments of other Administrative Commanders, other ships of the class and to integrate these comments into a technical analysis. COMSC will indicate at the time of approval any action associated with accomplishment of that alteration which will be undertaken by MSC Headquarters. This could include ordering of material, engineering support, preparation of work items or other portions of the normal sequence of work. One copy of each TRANSALT will be forwarded by COMSC to all Administrative Commanders. Administrative commands must provide a copy to each of their ships in which is authorized.

(3) Administrative Commanders retain approval authority for Minor Alterations. It is important to ensure that such alterations do not inadvertently affect much larger or more complex ship systems or assemblies in such a manner as to change operating characteristics or require further alteration to restore operability. Such cases are not Minor Alterations and the whole system or assembly must be treated in its entirety. Minor Alterations, just as normal TRANSALTs, are to be reviewed utilizing the Alteration Request Worksheet, MSC Form 4700/13. Minor TRANSALT approved by the Administrative Commanders must be formally submitted to COMSC (M-4E) within 30 days of the TRANSALT date and before the Work Package is issued for bids. All alterations of this nature for which an approval alteration is not in

15 November 1988

COMSC when the work package is received will be removed from the work package without exception since the administrative command had complete control of the alteration process.

(4) Administrative command engineering managers are required to closely review all alteration requests submitted for their approval to ensure completeness, sound justification and cost effectiveness. Authority to approve minor alterations is dependent on this review.

(5) Drawings, work items, alteration review documentation and any associated technical data developed by any MSC command in support of any approved alteration or Minor Alteration shall be provided to any other administrative command operating ships of the affected class.

h. Accomplishment of Alterations. Upon receipt of a TRANSALT form, Administrative Commanders shall institute action to accomplish the authorized work. This work normally should be accomplished during the first availability of sufficient length after plans and specifications have been prepared, funds made available, and special material, if any, procured. The following are applicable:

(1) Annual budgets for Programmed and Unprogrammed Alterations are administered by the Engineering Office (M-4E) at MSC Headquarters. Administrative Commanders are provided with specific expenditure authority to accomplish Programmed and Unprogrammed Alterations. Accounting data for special project alterations will be indicated on the TRANSALT.

(2) Upon completion of work authorized by a TRANSALT which affects the capacity, size of hatches, loading ability of ship, or other features of interest to other MSC commands, a copy of the completed TRANSALT shall be forwarded by the Administrative Commander to all other MSC commands. When required, a revised Ship's Characteristics Card shall be prepared and distributed.

(3) Within 90 days of completion of an authorized alteration for each ship, the Administrative Commander is to provide the following to COMSC (M-4E).

(a) A copy of the TRANSALT (MSC Form 4720/2) with the completion endorsement completed in its entirety.

(b) A copy of all logistical support as identified in the approved TRANSALT.

10. Summary. The Commander, Military Sealift Command is responsible for ensuring the material readiness of MSC ships. This directive is intended to aid in fully discharging that responsibility while minimizing, through delegation of authority, its impact on the operational obligations of the Administrative Commander. Through careful administration and responsible management by all concerned, the goal of internal readiness can be fully achieved. In this regard, Configuration Control is an important management tool employed to ensure that changes to the ship's structure of arrangement and replacement or additions of equipment are justifiable and supportable. Configuration Control also helps ensure that each ship remains in class. Additionally, controlling the configuration of machinery, systems and equipment improves the

15 November 1988

supportability of these by providing commonality of support requirements and required spare parts. Maintaining configuration uniformity among systems and equipment reduces crew training requirements and increases the likelihood that a crew member reporting aboard from another ship will be experienced in the operation and maintenance of the equipment for which he will ultimately be responsible. Configuration Control including alteration management ensures adequate technical documentation will exist to support future engineering related to the effected systems and provides an effective means of cost control and accounting.

11. Action. Headquarters Offices, Administrative Commanders, Area Commanders and Ships will ensure full compliance with the foregoing provisions of this directive.

12. Forms. MSC Forms listed in Table I of enclosure (1) are available from MSC Headquarters (Code M-11). MSC Forms listed in Table II of enclosure (1) are available through normal supply system sources.

13. Reports. The reporting requirements prescribed by this instruction are assigned report control symbols listed in enclosure (1) and are effective for three years from the date of this instruction.

Distribution:

SNDL	41B	(MSC Area Commands) (less FE, EUR, and SWA) (50)
	41B	(MSC Area Commands) (FE, SWA, and EUR only) (10)
	41C	(MSC Subarea Commands) (5)
	41D3	(MSC Offices)
	41G	(COMFSRON)
	41M	(TAGOS Support Units)
	T-100	(Masters, civil service manned ships)
	T-101	(Masters and operators, contract-operated tankers)
	T-102	(Masters and operators, contract-operated FSS)
	T-103	(Masters and operators, contract-operated TAGOS)

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15 November 1988

FORMS AND REPORTS TO BE PREPARED BY ADMINISTRATIVE COMMANDERS**TABLE I**

<u>FORM/REPORT NUMBER</u>	<u>TITLE</u>
MSC 4720-2 on MSC 4720/2	TRANSALT
MSC 4700-3 on MSC 4700/3	Final Cost of Ship Repairs
MSC 4700/11	TRANSALT Request
MSC 4700/12	Logistic Support Requirements
MSC 4700/14	Ship Alteration Proposal
MSC 4710-2 on NAVSHIPS 223-1 together with supplements as appropriate	Drydock Report (See COMSCINST 3121.9)
MSC 7130-1	Report of M&R Expenditures and Encumbrances (See COMSCINST 7130.1K)
MSC 4710-9	MSC Ship Repair and Overhaul Work Under Master Ship Repair Contract (See COMSCINST 4330.21C)
MSC 4441-16 where	Allowance List Change Data (Prepared by the ship required) (See COMSCINST 4000.2)

TABLE II

MSC 9400-1 on MSC 9400/1 (S/N 0104-LF-010-5000)	MSC Monthly Performance and Inventory Report (See COMSCINST 9400.3)
MSC 4020-2 on MSC 4020/2 (S/N 0104-LF-108-2001)	Ullage Report (Tankers only) (See COMSCINST 3121.9)